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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,370	08/05/2003	Daniel K. Tomaschko	S63.1-7132US03	6918
490	7590	04/18/2006	EXAMINER	
VIDAS, ARRETT & STEINKRAUS, P.A. 6109 BLUE CIRCLE DRIVE SUITE 2000 MINNETONKA, MN 55343-9185			BUI, VY Q	
			ART UNIT	PAPER NUMBER
			3734	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/634,370

Applicant(s)

TOMASCHKO, DANIEL K. ET AL

Examiner

Vy Q. Bui

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 2/17/2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 33-37,39-41 and 49 is/are pending in the application.
- 4a) Of the above claim(s) 38 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 33-37,39-41 and 49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 33-37, 39-41 and 49 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matters, which were not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

As to claim 33, it is noticed that the claims in the present invention are copied claims of U.S. Pat. 6,488,654-Gonzalez et al., which clearly shows in Fig. 10 shaft portion 62 of balloon 60 having different portions 64 and 68 of different diameters and in Fig. 11 shaft portion 71 having different portions 72, 74 and 76 of different diameters. Lines 9-12 of independent claim 33 of the present invention claims "remove balloon material from a portion of at least one of the proximal shaft section and the distal shaft section to form a shaft section having a first portion with a substantially uniform first diameter and a second portion with a substantially uniform second diameter, different than the first diameter". However, the specification and drawings of the present invention fail to disclose the claimed feature as recited in claim 33.

As to claim 36, the specification and drawings of the present invention fail to disclose "a rotating disk having an abrasive surface with a first grain value".

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As to claims 40-41, the specification and drawings of the present invention fail to disclose "a tapered transition between the first diameter portion and the second diameter portion of the shaft section" (claim 40) and "two or more tapered transitions" (claim 41).

Claims 34, 35, 37, 39 and 49 dependent to rejected claim 33 are also rejected for the same reason

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 33-37, 39-41 and 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over WANG et al.-5,807,520 in view of WAND et al.-5,525,388 and further in view of Forman-5,826,588.

As to claims 33-37, 39-41 and 49, WANG-'520 (col. 1, lines 49-54; col. 2, lines 26-30) discloses that it is well known to reduce balloon waist thickness and balloon cone/tapered portion thickness. WANG does not teach reducing balloon waist thickness and balloon cone/tapered portion thickness by abrading. WAND (Fig. 1-5, col. 2, lines 47-53) discloses a method of thinning a balloon-tapered portion is by machining, abrading the tapered portions of a balloon perform (parison). WANG-'520 and WAND-'388 do not explicitly disclose rotating a mandrel to rotate a balloon. However, Forman-'588 discloses rotating a mandrel to rotate a balloon during a process of removing a material of a balloon. A material removal process by abrading with a grinding machine to remove a material of a rotating object supported by a rotating mandrel is well known and it is inherently, the uniformed thicknesses of the waist

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portions are somewhat different from one another because of the manufacturing tolerance, therefore, Wang inherently has the claim feature (second diameter different from the first diameter). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use a grinding machine to thin a balloon material in a process as recited in the claims.

Response to Arguments

As to 35 U.S.C. 103(a) rejection, the Applicants argued that "Both Wang and Wand seek to provide balloons with uniform or constant wall thicknesses (Wang: column 2, lines 25-33; Wand: column 2, lines 46-47). Nowhere do the references, alone or in combination teach or suggest a method of removing material from a balloon wherein removal of said material is to form a shaft section having a first portion with a substantial uniform first diameter and a second portion with a substantially uniform second diameter, different than the first diameter".

However, Wang (col. 2, lines 32-33) discloses "cone and waist walls with reduced, uniform thicknesses" and inherently, the uniformed thicknesses of the waist portions are different from one another due to the manufacturing tolerance, therefore, Wang inherently has the claim feature (second diameter different from the first diameter). Notice that the differences in diameters of different waist portions always exist due to manufacturing tolerance. However, one can selectively make one **specific portion** bigger or smaller **another specific portion** and in this situation, the manufacturing tolerance has been accounted for.


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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vy Q. Bui whose telephone number is 571-272-4692. The examiner can normally be reached on Monday-Tuesday and Thursday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anhtuan T. Nguyen can be reached on 571-272-4963. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


04/17/2006

Vy Q. Bui
Primary Examiner
Art Unit 3734